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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/954,512
Filing Date	September 12, 2001
First Named Inventor	Jerry PELLETIER
Group Art Unit	1637
Examiner Name	S. Hashemi
Attorney Docket No.	514012000300

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Total Number Of Pages In This Submission

12 + 40
REFERENCES

ENCLOSURES (check all that apply)

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form + duplicate for fee processing (2 pages) | <input type="checkbox"/> Assignment Papers (for an Application) | <input type="checkbox"/> After Allowance Communication to Group |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment / Reply | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declarations | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | 1. PTO-1449 + copy (6 pages) |
| <input checked="" type="checkbox"/> Information Disclosure Statement (3 pages) | <input type="checkbox"/> Request for Refund | 2. Forty references (40) |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | 3. Return receipt postcard |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application | | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

Remarks

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Firm or Individual Name	Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, California 94304-1018
Signature	Randolph Ted Apple, Registration No. 36,429
Date	March 11, 2003

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

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FEE TRANSMITTAL FOR FY 2003

MAR 17 2003

Effective 01/01/2003 Patent fees are subject to annual revision

Complete if Known

Application Number 09/954,512
Filing Date September 12, 2001
First Named Inventor Jerry PELLETIER
Examiner Name S. Hashemi
Group Art Unit 1637
Attorney Docket No 514012000300

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TOTAL AMOUNT OF PAYMENT

(\$ 180)

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to

Deposit Account Number 03-1952
Deposit Account Name Morrison & Foerster LLP

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
☒ Applicant claims small entity status See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit Card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	510	2003	255	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$ 0)

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
31	- 31** = 0	x 9 = \$0	
Independent Claims	9	- 9** = 0	x 42 = \$0
Multiple Dependent		140 = \$0	

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claims, if not paid
1204	84	2204	42	**Reissue independent claims over original patent
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0)

** or number previously paid, if greater; For reissues, see above.

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions of the Commissioner	
1807	50	1807	50	Petitions related to provisional applications	
1806	180	1806	180	Submission of Information Disclosure Stmt	180
8021	40	8021	40	Recording each patent assignment per properties (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 180)

SUBMITTED BY

Name (Print/Type) Randolph Ted Apple

Registration No. 36,429
(Attorney/Agent)

Complete (if applicable)

Telephone (650) 813-5933

Signature

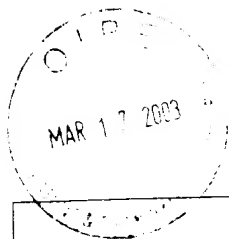
Date March 11, 2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary, depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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pa-772466



PATENT
Docket No. 514012000300

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Conchita Picazo
Conchita Picazo

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In the application of:

Jerry PELLETIER

Serial No.: 09/954,512

Filing Date: September 12, 2001

For: METHOD FOR INCREASING THE
PROCESSIVITY OF A DNA- OR RNA-
DEPENDENT POLYMERASE AND
COMPOSITIONS THEREFOR

Examiner: S. Hashemi

Group Art Unit: 1637

MAR 21 2003

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**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 AND § 1.98**

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicant submits for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- ☒ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
 - ☐ A fee is required. A check in the amount of ___ is enclosed.
 - ☒ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly, no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of ___ is enclosed.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.

Applicant would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 and is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the fee transmittal is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing 514012000300. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: March 11, 2003

Respectfully submitted,

By: 

Randolph Ted Apple
Registration No. 36,429

Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304-1018
Telephone: (650) 813-5933
Facsimile: (650) 494-0792

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary) MAR 11 2003	Docket Number 514012000300	Application Number 09 954,512
	Applicant Jerry PELLETIER	
	Filing Date September 12, 2001	Group Art Unit 1637
	Mailing Date March 11, 2003	

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
	1.	05/25/1982	4,331,589	Hung et al.			
	2.	07/28/1987	4,683,195	Mullis et al.			
	3.	07/28/1987	4,683,202	Mullis			
	4.	01/24/1989	4,800,159	Mullis et al.			
	5.	10/23/1990	4,965,188	Mullis et al.			
	6.	08/01/1995	5,438,131	Bergstrom et al.			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
	7.	01/27/1993	EP 0 524 808	Europe			
	8.	01/28/1998	EP 0 821 059	Europe			
	9.	10/07/1998	EP 0 869 187	Europe			
	10.	11/14/1991	WO 91/17267	WIPO			

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
	11.	Bertrand, E.L. and Rossi J.J. (1994). "Facilitation of hammerhead ribozyme catalysis by the nucleocapsid protein of HIV-1 and the heterogeneous nuclear ribonucleoprotein A1," <i>EMBO J.</i> 13(12):2904-2912.
	12.	Brill, S. J. and Bastin-Shanower, S. (December 1998). "Identification and characterization of the fourth single-stranded-DNA binding domain of replication protein A," <i>Mol. Cell Biol.</i> 18(12):7225-7234.
	13.	Brooks, E.M. et al. (November 1995). "Secondary structure in the 3' UTR of EGF and the choice of reverse transcriptases affect the detection of message diversity by RT-PCT," <i>BioTechniques</i> 19(5):806-815.
	14.	Carninci, P. et al. (January 1998). "Thermostabilization and thermoactivation of thermolabile

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DATE CONSIDERED:

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Form PTO-1449

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 514012000300

Application Number 09 954,512

Applicant

Jerry PELLETIER

Filing Date September 12, 2001

Group Art Unit 37

Mailing Date March 11, 2003

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15. Chang, Y.-N. et al. (November 1994). "Direct interactions between autoantigen La and human immunodeficiency virus leader DNA." *J. Virol.* 68(11):7008-7020.
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20. Gao, G. et al. (January 1997). "Conferring RNA polymerase activity to a DNA polymerase: a single residue in reverse transcriptase controls substrate selection," *Proc. Natl. Acad. Sci. USA Biochemistry* 94:407-411.
21. Gubler, U. and Hoffman, B.J. (1983). "A simple and very efficient method for generating cDNA libraries," *Gene* 25:263-269.
22. Guo, J. et al. (1995). "Defects in primer-template binding, processive DNA synthesis, and RNase H activity associated with chimeric reverse transcriptases having the murine leukemia virus polymerase domain joined to Escherichia coli RNase H." *Biochemistry* 34(15):5018-5029.
23. Herschlag, D. et al. (1994). "An RNA chaperone activity of non-specific RNA binding proteins in hammerhead ribozyme catalysis," *EMBO J.* 13(12):2913-2924.
24. Herschlag, D. (1995). "RNA chaperones and the RNA folding problem," *J. Biol. Chem.* 270(36):20871-20874.
25. Kanellopoulos, P.N. et al. (1995). "Crystallization and Preliminary X-ray crystallographic studies on the adenovirus ssDNA binding protein in complex with ssDNA," *J. Struct. Biol.* 115:113-116.
26. Khan, R. and Giedroc, D.P. (1992). "Recombinant human immunodeficiency virus type 1 nucleocapsid (NC^{p7}) protein unwinds tRNA." *J. Biol. Chem.* 267(10):6689-6695.
27. Köhler, P. and Marahiel, M.A. (1998). "Mutational analysis of the nucleoid-associated protein Hbsu of bacillus subtilis," *Mol. Gen. Genet.* 260:487-491.
28. Lapadat-Topolsky, M. et al. (1995). "Analysis of the nucleic acid annealing activities of nucleocapsid protein from HIV-1," *Nucleic Acids. Res.* 23(13):2434-2441.
29. Müller, G. et al. (1994). "Amino acid requirements of the nucleocapsid protein of HIV-1 for increasing catalytic activity of a ki-ras ribozyme in vitro," *J. Mol. Biol.* 242:422-429.
30. Namsaraev, E. and Berg, P. (September 1997). "Characterization of strand exchange activity of yeast Rad51 protein," *Mol. Cell. Biol.* 17(9):5359-5368.

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Form PTO-1449

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

MAR 17 2003 (Use several sheets if necessary)

Docket Number 514012000300

Application Number 09 951 512

Applicant

Jerry PELLETIER

Filing Date September 12, 2001

Group Art Unit 165

Mailing Date March 11, 2003

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- | | |
|-----|---|
| 31. | Pelletier, J. et al.. (1991) "Expression of the Wilms' tumor gene WT1 in the murine urogenital system." <i>Genes & Dev.</i> 5:1345-1356. |
| 32. | Rozen, F. et al. (March 1990). "Bidirectional RNA helicase activity of eucaryotic translation initiation factors 4A and 4F." <i>Mol. Cell Biol.</i> 10(3):1134-1144. |
| 33. | Soengas, M. S. et al. (January 3, 1997). "Structural features of Φ 29 single stranded DNA-binding protein." <i>J. Biol. Chem.</i> 272(1):303-310. |
| 34. | Spirin, A. S. (1998). "Chapter 11. Masked and translatable messenger ribonucleoproteins in higher eukaryotes." <i>Translational Control</i> pp. 319-334. |
| 35. | Sweezy, M. A. and Morrical, S. W. (1999). "Biochemical interactions within a ternary complex of the bacteriophage T4 recombination proteins uvsY and gp32 bound to single-stranded DNA." <i>Biochemistry</i> 38(3):936-944. |
| 36. | Tsuchihashi, Z and Brown, P.O. (1994). "DNA strand exchange and selective DNA annealing promoted by the human immunodeficiency virus type 1 nucleocapsid protein." <i>J. Virol.</i> 68(9):5863-5870. |
| 37. | Tsurumi, T. et al. (1998). "Overexpression, purification and helix-destabilizing properties of Epstein-Barr virus ssDNA-binding protein," <i>J. Gen. Virol.</i> 79:1257-1264. |
| 38. | Tuerk, C. et al. (March 1988). "CUUCGG hairpins: extraordinarily stable RNA secondary structures associated with various biochemical processes," <i>Proc. Natl. Acad. Sci. USA, Biochemistry</i> 85:1364-1368. |
| 39. | Wei, E.-Q. et al. (1998). "A single stranded DNA-binding protein, ssCRE-BP/Pur α , in rat lung and its increase in allergic airway inflammation," <i>Jpn. J. Pharmacol.</i> 78:419-427. |
| 40. | You, J.C. and McHenry, C.S. (1994). "Human immunodeficiency virus nucleocapsid protein accelerates strand transfer of the terminally redundant sequences involved in reverse transcription," <i>J. Biol. Chem.</i> 269:31491-31495. |

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